

Abstract

Methods of forming support layers for use in catheters using having a support layer included, and stents incorporating coatings of photosensitive polymerizable resins and stents including fibers coated with photosensitive polymerizable resins. A fiber is coated with a PPC resin and incorporated into a support structure for a catheter. Portions of the PPC are polymerized by exposure to light of a desired wavelength, causing increased rigidity and strength to the polymerized portions. As the PPC is polymerized, the fibers coated by the PPC resins become stronger and change the flexibility of devices incorporating such fibers. Additional embodiments include stents incorporating PPC coatings and methods of using such stents, including polymerizing a PPC coating after inserting a self-expanding or balloon-expandable stent.

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